

## Claims:

- 1) A compression device for the limb of a mobile patient comprising:  
an inflatable sleeve adapted to surround the limb;  
5 a conduit attached to said sleeve for delivering fluid to said sleeve; and  
a portable, wearable controller attached to said conduit that generates and controls the flow of fluid in the device.
- 10 2) The compression device as claimed in claim 1 wherein said controller comprises a microprocessor control system and a pump.
- 3) The compression device as claimed in claim 1 wherein at least one pressure sensor is associated with said sleeve.
- 15 4) The compression device as claimed in claim 1 wherein said sleeve includes one or more individually inflatable cells.
- 5) The compression device as claimed in claim 1 wherein said sleeve is  
20 low profile and discrete.
- 6) The compression device as claimed in claim 1 wherein said sleeve includes a leg cuff and a foot cuff.
- 25 7) The compression device as claimed in claim 6 wherein said leg and foot cuffs are anatomically shaped to provide compression on those parts of the leg or foot which have the greatest effect on blood flow.
- 8) The compression device as claimed in claim 1 further comprising a  
30 sock interposed between said sleeve and the limb.

9) The compression device as claimed in claim 6 wherein said leg cuff includes at least three cells.

5 10) The compression device as claimed in claim 1 wherein said controller is battery operated.

11) The compression device as claimed in claim 4 wherein each cell is monitored by a sensor.

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12) The compression device as claimed in Claim 6 wherein each cell is monitored by a sensor.

13) The compression device as claimed in claim 9 wherein said cells  
15 include a gaiter cell, adapted to wrap around the lower limb in the region closest to the ankle, a mid-calf cell, adapted to wrap around the lower limb above the region occupied by the gaiter cell and an upper cell adapted to wrap around the lower limb in the region between the mid-calf cell and the knee.

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14) The compression device as claimed in claim 9 wherein said cells may be pressurised to the same or different predetermined pressures.

15) The compression device as claimed in claim 13 wherein said cells  
25 may be pressurised to the same or different predetermined pressures.

16) The compression device as claimed in claim 1 wherein the said flow of fluid creates pressure in said sleeve, further comprising monitoring means for monitoring pressure in said sleeve.

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17) The compression device as claimed in claim 14 wherein the pressure in the device increases when the patient stands.

18) Use of a compression device as claimed in claim 1 in the prevention  
5 or treatment of venous insufficiency, oedema, DVT or postthrombotic syndrome.